



January 23, 2017

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

**Re: *Spectrum Bands Above 24 GHz et. al.*, GN Docket No. 14-177, IB Docket No. 15-256,
WT Docket No. 10-112, and IB Docket No. 97-95**

Dear Ms. Dortch:

On January 23, 2017, EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC (collectively “EchoStar”) met with the Commission’s International Bureau to discuss EchoStar’s proposals and concerns in the above-referenced proceeding. EchoStar was represented by Jennifer A. Manner, Senior Vice President, Regulatory Affairs, Jodi Goldberg, Associate Corporate Counsel, Regulatory Affairs, and Brennan Price, Senior Principal Engineer, Regulatory Affairs, and outside counsel, William Wiltshire, of Harris Wiltshire & Grannis LLP. EchoStar met to discuss the above-reference proceeding with Jose Albuquerque, Kerry Murray, Karl Kensinger, Chip Fleming, Paul Blais, Kal Krautkramer, and Steve Duall (by phone) of the Satellite Division, International Bureau.

In the meeting the parties discussed the attached talking points, which were distributed to the attendees.

Pursuant to the Commission’s rules, this notice is being filed in the above-referenced dockets for inclusion in the public record. Please contact me should you have any questions.

Respectfully submitted,

/s/ Jodi Goldberg

Jodi Goldberg
Associate Corporate Counsel
EchoStar Corporation
11717 Exploration Lane
Germantown, MD 20876
(301) 428-7140

Attachment



cc: Jose Albuquerque
Kerry Murray
Karl Kensinger
Chip Fleming
Paul Blais
Kal Krautkramer
Steve Duall



Providing Broadband and 5G Services via Satellite at 39, 47, and 50 GHz

Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, GN Docket No. 14-177

January 23, 2017

- EchoStar¹ is the largest commercial operator of geostationary satellites in the United States and the largest satellite broadband provider in North America, with over one million users.
- Satellite delivery plays a critical role in bringing broadband services to rural, remote, and underserved areas. The 39 GHz (37.5-40 GHz), 47 GHz (47.2-50.2 GHz), lower 50 GHz (50.4 – 51.4 GHz), and upper 50 GHz (51.4-52.6 GHz) bands are vital to the provision of broadband services, including 5G, by next-generation satellite systems, for the benefit of U.S. customers.
- As EchoStar demonstrated in its comments, satellite gateway earth stations in the Fixed Satellite Service (FSS) and Upper Microwave Flexible Use Service (UMFUS) systems can share frequency bands. Accordingly, it is critical that sharing techniques be equitably evaluated in a thorough cost/benefit analysis in order to achieve the most efficient shared use and greatest public interest.
- In order to ensure that adequate access to this spectrum is available for UMFUS and FSS use, the FCC should:
 1. **Preserve the co-primary status of the FSS in the 47 GHz and lower 50 GHz bands.** The differences between gateway earth stations and terrestrial mobile stations enable sharing of this spectrum on a co-primary basis. This will ensure that both UMFUS and FSS operators can provide broadband services to consumers across the United States with regulatory certainty.
 2. **Adopt the sharing regime jointly proposed by AT&T and EchoStar in the 47 GHz and lower 50 GHz bands.** UMFUS licensees will be given priority in a limited number of urban core areas, where deployment of terrestrial mobile services using these bands is likely to occur. Outside these urban cores, licensees in the co-primary services may coordinate their operations on a first-come, first-served basis, much the same way as satellite and terrestrial services do in other bands.
 3. **Refrain from acting on the upper 50 GHz band.** This band is the subject of a petition for rulemaking filed by Boeing and studies in the ITU Radiocommunication Sector considering FSS operations in the band. Action at this time may prejudice the appropriate use for this spectrum in ways that may not be consistent with the outcomes of domestic and international processes.

¹ EchoStar refers collectively to EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC.



4. **Authorize operation of FSS systems at ITU-Approved PFD levels in the 39 GHz band to overcome rain fade.** The FCC has recognized the need for satellite operators to use a higher power level to overcome rain fade at 39 GHz, but has not specified the precise conditions under which such power increases are allowed. This matter has been fully studied at the ITU, which has recommended criteria that pose little, if any, risk of interference to terrestrial operations, and would permit FSS operators to reliably provide broadband and other services to U.S. customers.
- The satellite industry is evaluating and beginning to utilize new techniques and higher frequency bands for needed broadband services to support increased consumer demands. The industry has invested years of planning and capital to bring these advanced broadband services to fruition. The FCC has an opportunity to adopt a regulatory regime for these millimeter wave bands that allows both broadband satellite and UMFUS to deliver these important services to U.S. consumers wherever they are located.